

**AMENDMENT TO THE DRAWING(S)**

Fig. 1 has been amended. The attached sheet of formal drawing replaces the original sheet including Fig. 1.

## REMARKS/ARGUMENTS

Claims 1-8, 10 and 11 are pending in the instant application.

In the most recent Office Action, claims 1-8 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over JP 11-013640 ("Koyama") in view of alleged design choice. Claims 10 and 11 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Koyama in view of alleged design choice as applied to claim 1 above, and further in view of US Patent No. 2,496,497 to Russell. Additionally, the specification was objected to for minor informalities. Applicant respectfully traverses all rejections for at least the reasons set forth below.

As amended above, Figure 1 and the accompanying description are amended to replace reference numeral 16, designating the oil sump, with reference numeral 26. Reference numeral 16 was inadvertently duplicated, and used to refer to other structure elsewhere in the application. The specification is also amended to correct the informality noted in the Office Action. No new matter is added by these amendments. Favorable reconsideration and withdrawal of the objection is kindly requested.

Turning to the claims, claim 1 recites a gear pump comprising, *inter alia*, a shaft having a first surface extending through the hole of a gearwheel, the gearwheel having a second surface. The first and second surfaces are shaped to allow transfer of motion between the two via a region of contact having an axial extent less than half the axial extent of the gearwheel. Claim 1 further recites the region of contact being divided by a radial plane extending centrally through the gearwheel.

The Office Action admits, as it must, that Koyama fails to disclose the region of contact having an axial extent being less than half the gearwheel axial extent. The Office Action avers that it would have been obvious to one of ordinary skill in the art to "utilize the width of the region of contact between the shaft and the gearwheel, since they are merely design parameters, depending on temperature, pressure, or stress acted/applied on the teeth of the gearwheel or depending on being used for a particular purpose, or solving a stated problem." The Office relies upon *In re Kuhle*, 526 F.2d 553, 118 USPQ 7 (CCPA 1975) in support of its conclusion.

Applicant respectfully submits that the Office Action's reliance on *Kuhle* is misplaced. *Kuhle* held that the relocation of a part, in particular of an electrical contact, was an obvious matter of design choice within the skill of the art. By contrast, in this case as admitted by the Office Action, the differences between the claim and Koyama are not simply a matter of rearrangement of features disclosed in Koyama. Rather, the admitted difference between Koyama and the recited claim is that Koyama does not disclose the structural, dimensional features of the region of contact. Therefore, applicant respectfully respectfully submits that *Kuhle* is inapposite to the present case. It has been held by the Courts that "It is inappropriate to 'squeez[e] new factual situations into preestablished pigeonholes.'" *In re Eli Lilly and Co.*, 902 F.2d 943, 14 USPQ 2d 943, 14 USPQ 2d 1741 (Fed. Cir. 1990).

In order to establish *prima facie* obviousness, there must be some suggestion or motivation to modify the references. *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ 2d 1453, 1457 (Fed. Cir. 1998). The absence of such a suggestion is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 1579, 42 USPQ 2d 1378, 1383 (Fed. Cir. 1997). "The showing of a motivation . . . must be clear and particular, and it must be supported by actual evidence." *Teleflex, Inc. v. Ficosa North American Corp*, 299 F.3d 1313, 63 USPQ 2d 1374 (Fed. Cir. 2002).

The Office Action alleges that it would have been obvious to utilize the width of the region of contact. However, this does not address the fact that the region of contact as disclosed in the Koyama reference does not meet the language of claim 1. The suggestion that the width of the region of contact is "merely [a] design parameter[]" does not excuse the requirement for some evidence of a teaching or suggestion of such a feature in the prior art. "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). Moreover, "rarely . . . will the skill in the art component operate to supply missing knowledge or prior art to reach an obviousness judgment." *Al-Site Corp. v. VSI International Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999).

Additionally, the Office Action stats that "there is nothing in the record which establishes that the claimed width of the region of contact between the shaft and the gearwheel presents a

novel or unexpected result.” This is demonstrably incorrect. The instant specification at page 2, lines 8-20, discloses that the region of contact being limited and less than the axial extent of the gearwheel ensures that any local transfer of motion cannot take place at a region that is a large distance from the radial plane extending centrally through the gearwheel. Therefore, the risk of uneven stressing of the gearwheel is substantially eliminated. Examiner’s attention is also drawn to the background description of the art, page 1, lines 23-29. On the other hand, the Office Action can point to no teaching or suggestion in the prior art of the desirability that the region of contact be less than the axial extent of the gearwheel, except of course in Applicants own disclosure. However, use of Applicant’s own disclosure is, of course, impermissible hindsight reconstruction. *W.L.Gore Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983).

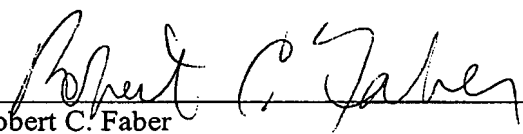
Therefore, in light of the absence of any teaching or suggestion in the prior art of the recited feature that the region of contact has an axial extent of less than half the gearwheel axial extent and is divided by a radial plane extending centrally through the gearwheel, and further in light of the absence of any teaching or suggestion that would motivate one of ordinary skill in the art to modify the Koyama reference to arrive at such a structure, Applicant respectfully submits that a *prima facie* case of obviousness has not been made. Dependent claims 2-8 and 10-11 each depend, either directly or indirectly, from independent claim 1. These dependent claims are each separately patentable, but are offered as patentable for at least the same reasons as their underlying independent base claim. Therefore, applicant kindly requests favorable reconsideration and withdrawal of the rejection.

Turning to the proposed combination of Koyama with Russell, even presuming that Russell teaches all that is attributed to it, and further presuming that there exists some motivation or suggestion for one of ordinary skill in the art to combine the references as proposed in the Office Action, there is no teaching or suggestion in Russell to ameliorate the underlying deficiencies of Koyama with respect to claim 1 as noted above. Therefore, applicant respectfully submits that all claims are patentably distinguished over Koyama and Russell, taken singly or in any combination. Favorable reconsideration and withdrawal of the rejection is kindly requested.

In light of the foregoing, applicant respectfully submits that all claims recite patentable subject matter, and kindly solicit an early and favorable notice of allowability. In the interest of brevity, applicant has addressed only so much of the rejections as is considered sufficient to demonstrate the patentability of all claims. Applicant's failure to address any portion of the rejections should not be construed as an acquiescence in the propriety of such portions not addressed. Applicant respectfully submits that the claims are patentable for reasons other than those discussed, *supra*. If the Examiner has any reservation in allowing the claims, and believes that a telephone interview would advance prosecution, she is kindly requested to telephone the undersigned at her earliest convenience.

Respectfully submitted,

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10/516,857 Gear pump

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